

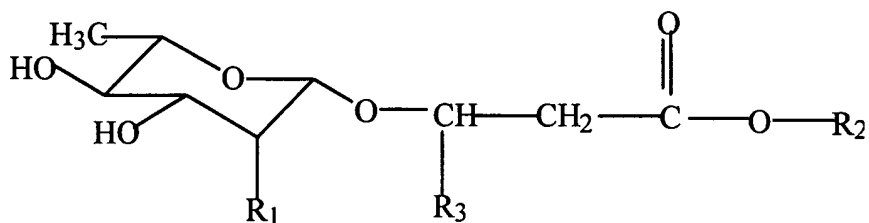
IN THE CLAIMS

This listing of Claims will replace all prior versions and listings of Claims in the application:

Claims 1-25 (Cancelled)

26. (Currently amended) A method ~~to treat signs of aging of the skin~~ for treating age-associated signs of the skin, the method comprising:

administering to a subject ~~in need of a treatment for having age-associated~~ signs of aging of the skin, an effective amount of a composition comprising as an active ingredient, one or more rhamnolipids of Formula I:



wherein $\text{R}^1 = \text{H}$, unsubstituted α -L-rhamnopyranosyl, α -L-rhamnopyranosyl substituted at the 2 position with a group of formula $-\text{O}-\text{C}(=\text{O})-\text{CH}=\text{CH}-\text{R}_5$, or $-\text{O}-\text{C}(=\text{O})-\text{CH}=\text{CH}-\text{R}_5$;

$\text{R}^2 = \text{H}$, lower alkyl, $-\text{CHR}_4-\text{CH}_2-\text{COOH}$ or $-\text{CHR}_4-\text{CH}_2-\text{COOR}_6$;

$\text{R}^3 = -(\text{CH}_2)_x-\text{CH}_3$, wherein $x = 4-19$;

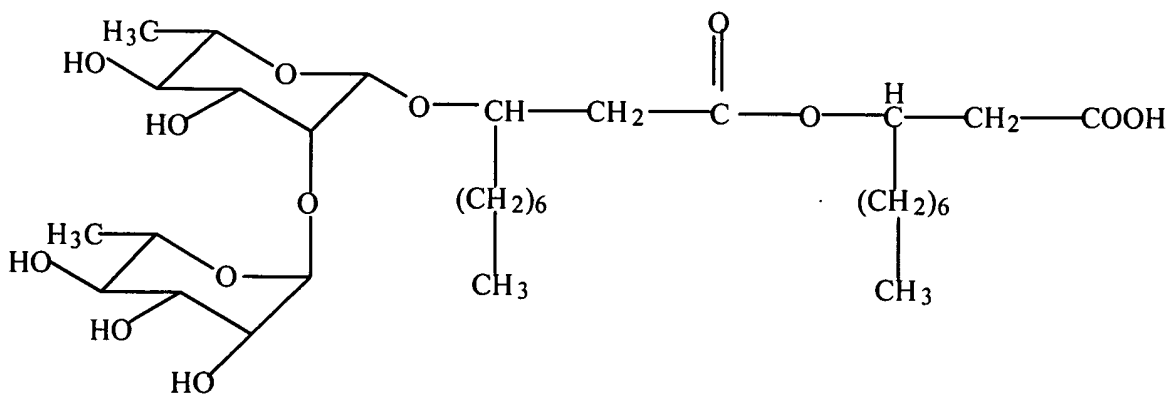
$\text{R}^4 = -(\text{CH}_2)_y-\text{CH}_3$, wherein $y = 1-19$;

$\text{R}^5 = (\text{CH}_2)_z-\text{CH}_3$, wherein $z = 1-12$; and

R^6 = lower alkyl,

~~thereby~~ wherein the compound of formula I ~~promoting~~ promotes re-epithelization of the skin and thereby treating age-associated signs of ~~aging~~ of the skin.

27. (Previously presented) The method as claimed in claim 26, wherein said rhamnolipid of Formula 1 is α -L-rhamnopyranosyl-(1,2)- α -L-rhamnopyranosyl)-3-hydroxydecanoyl-3-hydroxydecanoic acid having the following formula:



28. (Previously presented) The method as claimed in claim 26, wherein the one or more rhamnolipids of Formula 1 are selected from the group consisting of compounds of Formula 1 wherein:

R^1 = $-O-C(=O)-CH=CH-R^5$, R^2 = $-CHR^4-CH_2-COOH$, R^3 = $-(CH_2)_6-CH_3$, R^4 = $-(CH_2)_2-CH_3$, and R^5 = $-(CH_2)_6-CH_3$;

R^1 = α -L-rhamnopyranosyl substituted at the 2-position by $-O-C(=O)-CH=CH-R^5$, R^2 = $-CHR^4-CH_2-COOCH_3$, R^3 = $(CH_2)_6-CH_3$, R^4 = $-(CH_2)_6-CH_3$, and R^5 = $-(CH_2)_6-CH_3$;

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AMENDMENT B

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$R^1 = -O-C(=O)-CH = CH-R_5$, $R^2 = -CHR_4-CH_2-COOCH_3$, $R^3 = -(CH_2)_6-CH_3$,
 $R^4 = -(CH_2)_2-CH_3$, and $R^5 = -(CH_2)_6-CH_3$; and

$R^1 = \alpha\text{-L-rhamnopyranosyl}$ substituted at the 2-position by $-O-C(=O)-CH=CH-R^5$, $R^2 = -CHR^4-CH_2-COOCH_3$, $R^3 = -(CH_2)_6-CH_3$, $R^4 = -(CH_2)_6-CH_3$, and $R^5 = -(CH_2)_6-CH_3$.